

Datasheet: MCA5977

Description:	MOUSE ANTI INFECTIOUS SALMON ANEMIA VIRUS (ISAV)
Specificity:	Infectious Salmon Anemia Virus (ISAV)
Other names:	INFECTIOUS SALMON ANEMIA VIRUS
Format:	Con S/N
Product Type:	Monoclonal Antibody
Clone:	4A11
Isotype:	IgG1
Quantity:	0.5 ml

Product Details

Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit www.bio-rad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry			▪	
Immunohistology - Frozen	▪			
Immunohistology - Paraffin			▪	
ELISA	▪			
Immunoprecipitation			▪	
Western Blotting			▪	
Immunofluorescence	▪			

Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the product for use in their own system using appropriate negative/positive controls.

Target Species	Viral
Product Form	Tissue Culture Supernatant - liquid (concentrated)
Preservative Stabilisers	0.09% Sodium Azide (NaN ₃)
Approx. Protein Concentrations	IgG concentration 0.5 - 1.0 mg/ml
Immunogen	ISAV isolate

External Database
Links

UniProt:

[Q8V3T7](#)

[Related reagents](#)

[Q8V3U0](#)

[Related reagents](#)

Entrez Gene:

[3170816](#)

NP

[Related reagents](#)

[3170814](#)

HA

[Related reagents](#)

Fusion Partners

Spleen cells from immunised Balb/c mice were fused with cells of the Mouse SP2/0-Ag-14 myeloma cell line.

Specificity

Mouse anti Infectious Salmon Anemia Virus, clone 4A11, specifically recognizes the Infectious Salmon Anemia Virus, an orthomyxovirus being the sole member of the *Isavirus* genus. ISAV is the causative agent for Infectious Salmon Anemia (ISA), a notifiable disease affecting Atlantic salmon and resulting in high mortality ([Weli, S.C., et al. 2013](#)). ISAV is similar in structure to other orthomyxoviruses, with the exception of the hemagglutinin (HA) protein that would appear to be significantly different in size than for other influenza type viruses ([Rimstad, E., et al. 2001](#))

ISAV was first identified in farmed salmon in Norway in 1984, spread by wild marine fish species, it has since been detected in farmed Atlantic salmon stocks throughout the North Atlantic, North West America and more recently in Chile, where it has also been detected in farmed Coho salmon ([Godoy, M.G., et al. 2008](#)). Due to the high mortality of infected individuals, ISAV has a significant economic impact and infections are of serious concern to the aquaculture industry.

While the route of entry into the host, is as yet, poorly understood, evidence indicates that the virus enters through epithelial tissue in the gills ([Weli, S.C., et al. 2013](#)), this is similar to mammalian orthomyxoviruses which target respiratory tissues.

Clone 4A11 can be used to identify ISAV in the tissues of infected fish and may be of use for research into methods for diagnosis and control of ISAV infections in the aquaculture industry.

Further Reading

1. Kent, M.L. (2000) Marine netpen farming leads to infections with some unusual parasites. [Int J Parasitol. 30: 321-6.](#)
2. Aamelfot, M., et al. (2013) Characterisation of a monoclonal antibody detecting Atlantic salmon endothelial and red blood cells, and its association with the infectious salmon anaemia virus cell receptor. [J Anat. 222\(5\): 547-57.](#)
3. Lyngstad, T.M., et al. (2012) Low virulent infectious salmon anaemia virus (ISAV-HPR0) is prevalent and geographically structured in Norwegian salmon farming. [Dis Aquat Organ. 101: 197-206.](#)
4. Weli, S.C., et al. (2013) Infectious salmon anaemia virus infection of Atlantic salmon gill epithelial cells. [Virol J. 10: 5](#)
5. Falk, K., et al. (1998) Characterization and applications of a monoclonal antibody against infectious salmon anaemia virus. [Dis. Aquat. Org. 34: 77-85.](#)
6. Rimstad, E. et al. (2001) Characterization of the infectious salmon anemia virus

genomic segment that encodes the putative hemagglutinin. [J Virol. 75 \(11\): 5352-6.](#)
 7. Godoy, M.G., *et al.* (2008) First detection, isolation and molecular characterization of infectious salmon anaemia virus associated with clinical disease in farmed Atlantic salmon (*Salmo salar*) in Chile. [BMC Vet Res. 4: 28.](#)

Storage	Store at +4°C or at -20°C if preferred. This product should be stored undiluted. Storage in frost-free freezers is not recommended. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.
Guarantee	18 months from date of despatch.
Health And Safety Information	Material Safety Datasheet documentation #10053 available at: 10053: https://www.bio-rad-antibodies.com/uploads/MSDS/10053.pdf
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

Goat Anti Mouse IgG IgA IgM (STAR87...)	Alk. Phos. , HRP
Goat Anti Mouse IgG (STAR77...)	HRP
Rabbit Anti Mouse IgG (STAR12...)	RPE
Rabbit Anti Mouse IgG (STAR8...)	DyLight®800
Rabbit Anti Mouse IgG (STAR13...)	HRP
Goat Anti Mouse IgG (STAR76...)	RPE
Goat Anti Mouse IgG (STAR70...)	FITC
Goat Anti Mouse IgG (Fc) (STAR120...)	FITC , HRP
Rabbit Anti Mouse IgG (STAR9...)	FITC
Goat Anti Mouse IgG (H/L) (STAR117...)	Alk. Phos. , DyLight®488 , DyLight®680 , DyLight®800 , FITC , HRP

Recommended Useful Reagents

[RABBIT ANTI SALMONID Ig \(AHP761\)](#)

North & South America	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: antibody_sales_us@bio-rad.com	Worldwide	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: antibody_sales_uk@bio-rad.com	Europe	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: antibody_sales_de@bio-rad.com
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